

**IN THE CLAIMS:**

On page 8, line 1 please cancel "CLAIMS" and substitute:

**--WE CLAIM AS OUR INVENTION:--** therefor.

Cancel claims 1-20.

5           1-20. (Cancelled)

21. (New) An implantable medical apparatus for detecting diastolic heart failure (DHF), comprising:

10           a pressure measuring unit adapted to interact with a subject to measure pulse pressure, as a blood pressure parameter, in a cardiac cycle for a predetermined workload situation of the subject, said pressure measuring unit emitting a pulse pressure signal indicative of said pulse pressure; and

15           a comparator supplied with said pulse pressure signal that compares said pulse pressure with a predetermined reference value to produce a comparison result indicative of DHF state of the heart of the subject.

22. (New) An apparatus as claimed in claim 21 wherein said pressure measuring unit also is adapted to measure said pulse pressure in a cardiac cycle for a rest situation of the subject, and comprising a difference  
20           former that forms a difference between said pulse pressure for said predetermined workload situation and said pulse pressure for said rest situation of the subject, and wherein said comparator compares said difference to said reference value to obtain said comparison result.

23. (New) An apparatus as claimed in claim 21 comprising an  
25           activity sensor that detects an activity level of the subject and emits an activity signal representing said activity level, and a workload calculator supplied with said activity signal that determines a current workload of the subject from said activity signal.

24. (New) An apparatus as claimed in claim 21 wherein said pressure measuring unit measures said pulse pressure during a plurality of cardiac cycles, and comprising an averaging unit that forms an average value of the pulse pressure measured during said plurality of cardiac cycles, and  
5 wherein said comparator compares said average value with said predetermined reference value to obtain said comparison result.

25. (New) An apparatus as claimed in claim 21 comprising a wireless communication unit connected to said comparator that automatically wirelessly transmits said comparison result to an external receiver.

10 26. (New) An apparatus as claimed in claim 21 comprising a memory connected to said comparator that stores said comparison result.

27. (New) An apparatus as claimed in claim 21 wherein said pressure measuring unit comprises a pressure sensor adapted for placement at a location selected from the group consisting of the right ventricle of the  
15 heart of the subject and coronary veins of the heart of the subject.

28. (New) An apparatus as claimed in claim 21 wherein said pressure measuring unit measures a maximum of said pulse pressure.

29. (New) An apparatus as claimed in claim 21 wherein said pressure measuring unit measures a minimum of said pulse pressure.

20 30. (New) An apparatus as claimed in claim 21 wherein said pressure measuring unit comprises a sensor for delivering photo-plethysmographic signals for determining said pulse pressure.

31. (New) An implantable cardiac pacemaker comprising:

a diastolic heart failure (DHF) determining device comprising a  
25 pressure measuring unit adapted to interact with a subject to measure pulse pressure, as a blood pressure parameter, in a cardiac cycle for a predetermined workload situation of the subject, said pressure measuring unit emitting a pulse pressure signal indicative of said pulse pressure, and a comparator  
30 supplied with said pulse pressure signal that compares said pulse pressure with a predetermined reference value to produce

a comparison result indicative of DHF state of the heart of the subject; and

5 a therapy administration unit adapted to interact with the heart of the subject to administer electrical cardiac therapy to the heart, said therapy administration unit being connected to said DHF determining device and being supplied with said comparison result therefrom, and administering said electrical cardiac therapy dependent on said comparison result.

10 32. (New) A pacemaker as claimed in claim 30 comprising an activity sensor that detects an activity level of the subject and emits an activity signal representing said activity level, and a workload calculator supplied with said activity signal that determines a current workload of the subject from said activity signal.

15 33. (New) A pacemaker as claimed in claim 32 wherein said pressure measuring unit comprises a pressure sensor that measures said pulse pressure, and wherein said pressure sensor also forms said activity sensor.

34. (New) A method for detecting diastolic heart failure (DHF), comprising the steps of:

20 measuring a pulse pressure in vivo, as a blood pressure parameter, in a cardiac cycle of a subject for a predetermined workload situation of the subject; and

25 electronically comparing said pulse pressure with a predetermined reference value to produce an electronic comparison result indicative of DHF state of the heart of the subject.

30 35. (New) A method as claimed in claim 34 comprising also measuring said pulse pressure in a cardiac cycle for a rest situation of the subject, and electronically forming a difference between said pulse pressure for said predetermined workload situation and said pulse pressure for said rest situation of the subject, and wherein the step of comparing comprises comparing said difference to said reference value to obtain said comparison result.

36. (New) A method as claimed in claim 34 comprising measuring said pulse pressure during a plurality of cardiac cycles, and electronically forming an average value of the pulse pressure measured during said plurality of cardiac cycles, and wherein the step of comparing comprises  
5 comparing said average value with said predetermined reference value to obtain said comparison result.

37. (New) A method as claimed in claim 34 comprising automatically wirelessly transmitting said comparison result to an external receiver.

10 38. (New) A method as claimed in claim 34 comprising measuring said pulse pressure using a pressure sensor placed at a location selected from the group consisting of the right ventricle of the heart of the subject and coronary veins of the heart of the subject.

15 39. (New) A method as claimed in claim 34 wherein the step of measuring said pulse pressure comprises measuring a maximum of said pulse pressure.

40. (New) A method as claimed in claim 34 wherein the steps of measuring said pulse pressure comprises measuring a minimum of said pulse pressure.

20 41. (New) An apparatus as claimed in claim 34 wherein the step of measuring said pulse pressure comprises measuring said pulse pressure using a sensor that delivers photo-plethysmographic signals representing said pulse pressure.

25 42. (New) A method as claimed in claim 34 comprising determining said pulse pressure during said predetermined workload situation of the subject at a time when the subject is not suffering from DHF, and determining said reference value from said pulse pressure for said predetermined workload situation when the subject is not suffering from DHF.